

FW: Lafarge Building Materials, Inc.: SPDES No. NY0005037

Michelle Josilo to: Region2 NPDES

06/14/2013 03:29 PM

6 attachments









North.Pond.JPG Landfill.C.Left.Screenings.Pile.Right.JPG Outfall.006.Swale.1.JPG Outfall.006.Swale.2.JPG





Outfall.013.Upgrade.JPG Outfall.013.Sediment.JPG

----Original Message----

From: Lantner, Murray

Sent: Tuesday, May 21, 2013 2:11 PM To: Sorenson, Sara; Josilo, Michelle

Subject: FW: Lafarge Building Materials, Inc.: SPDES No. NY0005037

FYI see paragraph 1 DEC is anticipating again modifying this Permit.

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----Original Message----

From: James Malcolm [mailto:jemalcol@qw.dec.state.ny.us]

Sent: Tuesday, May 21, 2013 10:26 AM

To: Matt Stewart

Cc: Andrea Dzierwa; Paul Rappleyea

Subject: Lafarge Building Materials, Inc.: SPDES No. NY0005037

Matt,

The notes/comments listed below are provided following my site inspection of the stormwater management program at the Lafarge facility in Ravena on May 17, 2013. I was accompanied by you, Paul Rappleyea, Bob Conden (EA Engineering), and Sarah Sweeney who has recently replaced John Reagan as Environmental Manager. One of the goals of my inspection was to discuss the recent submittal by Lafarge/EA Engineering for the design of the stormwater management structure at the Quarry (proposed Outfall No. 027), inspect Outfall No. 006 and the sources of stormwater, and upgrades at other existing stormwater outfalls (Nos. 013 & 014).

General:

1. You reported that the date for operation of the modernized plant has been determined by Lafarge and I will leave any formal notification of this date to you. However, the two outstanding items related to the plant startup and the SPDES permit (impingement & entrainment and the non-contact cooling water) are to be discussed during a meeting with Central Office staff (Sudhir, Shayne,

Colleen, Sarah, myself) within the next few weeks. The goal would be to discuss/resolve those two items and any other outstanding permit related items. It is expected that the Department will then proceed/complete the SPDES permit modification. Please let me know of potential dates and times and I will check with the appropriate staff on their availability. I assume it will be held at Central Office and we will reserve a room for you and your consultants. We will continue to work with you on these issues and let the project schedule drive the process...

- 2. An update on the new leachate treatment system was also provided during this inspection. It is my understanding that a contractor has been selected to install the "collection system", that a vendor has been selected for the treatment unit, and that the design of the discharge line from the system to the Hudson River is being completed (with a Request for Proposal to follow). You reported that the startup date for the entire system is planned for October 2013.
- 3. We reviewed the list of violations that Lafarge compiled and it was noted that certain outfalls have improved (No. 006: removal of Callanan operations and cleaning of swale during 2012, No. 015: plunge pool added & No. 018: stabilized slopes), others have documented noncompliance but will be addressed with the new leachate treatment system (No. 007), others are in need of repair (Nos. 013), and others are being investigated due to potential off-site impacts (Outfall No. 014).
- 4. We discussed the next step for outfalls that continue to document noncompliance and you noted that chemical addition (Photafloc: polymer gel) will be jar tested to determine if it is appropriate for use. I reminded you that a Water Treatment Chemical form would need to be completed and approved by the Department before use. Bob and I discussed the possible use of Outfall No. 003 for stormwater management/storage/treatment for the plant side of the facility and it seemed like a good topic for discussion at our upcoming meeting. You could also share your Plan "C" with us at that time...

Outfall No. 006:

- 1. We inspected Outfall No. 006 and the North Pond (photographs attached), which conveys stormwater from Landfill Cell C (closed), a screenings pile located near the plant entrance, and surrounding traffic areas. We understand that North Pond serves to reduce any flooding/icing that may occur in proximity to the railroad tracks and plant entrance on Route 9W. It was reported that the stormwater is manually pumped from North Pond to an intermediate swale (Arcadis) and is then discharged to the main swale that leads to Outfall No. 006. The potential for impacts from the closed landfill (seeps and high pH), the screenings pile (sediment and increase in turbidity during rain events), and the traffic areas (oil & grease) are present and additional monitoring (in the field during transfer events?) may be appropriate. As we discussed, I would like Shayne and Sudhir to review this issue and let us know if the proposed permit limits/sampling requirements are appropriate.
- 2. The main swale was inspected and found to be in satisfactory condition following the cleaning activities conducted during CY 2012. Your violation summary indicated that five (5) violations of the 50 mg/L limit have been documented since November 2010 with the most recent being on October 19, 2012 (TSS = 56 mg/L) and January 31, 2013 (TSS = 54 mg/L). As we discussed, it is critical that the slopes and bottom of the swale become vegetated in order to provide filtering of sediment and reduce erosion. It was observed that some form of vegetation has started growing in the center of the swale but the slopes are mostly bare with patchy grass (photographs attached). Therefore, it is our understanding that Lafarge will begin hydroseeding the slopes and

repeat as necessary in order to establish vegetation. Bob and I noticed that a restriction in the main swale is present at the emergency overflow of the stormwater pond (Lake Minehardt). This restriction may result in an increase in velocity/scouring of sediment and it was reported that Lafarge will widen the swale to match the upstream channel.

Outfall No. 027:

- 1. It was reported that the septic tank utilized by the Quarry staff was pumped out/cleaned on January 8, 2013 and found to be in satisfactory condition after an inspection by New York State Professional Engineer (Pat Prendergast). The results of this inspection were documented by Mr. Prendergast in a letter to Paul dated January 29, 2013. The letter along with a certification by Lafarge was submitted to U.S. EPA in a letter dated February 8, 2013. The only outstanding item with regards to this operation is the removal of the overflow pipe from the SPDES permit. To the best of my knowledge, this issue will be resolved once the permit is finalized. The permitted outfall (No. 004) will need to be formally decommissioned in accordance with 6 NYCRR Part 750-2.11 (Closure Requirements for Disposal Systems) once it is formally removed from the SPDES permit.
- 2. It was reported that the oil/water separator located at the Quarry has been closed (since January 2013) and that the pump has been disconnected. You reported that it is the intention of Lafarge to use this tank for storage only in a hold and haul scenario. It was noted that the infrequent use of the system and the ease of pumping out/cleaning of the tank was the basis of this decision. The need to decommission the outfall (No. 005) will be required as noted above for Outfall No. 004. The SPDES permit will need to be revised to reflect the removal/decommissioning of the outfall.
- 3. As we discussed, one of the concerns relayed by EPA during their inspection was the fuel off-loading area and discharge of the secondary containment. You reported that there are existing off-loading procedures used by Quarry staff that prohibit both off-loading of petroleum during a rain event and the discharge of any separate phase or floating product from the secondary containment. As recommended, Lafarge should review/revise the current procedures and document that all appropriate staff have reviewed the document/understand the procedures (Name/Date of Review). Currently, there is no treatment of the material collected in the secondary containment and you reportedly plan to connect the structure directly to Outfall No. 027. I recall that we discussed this issue with Sudhir and we can confirm during our upcoming meeting that the SPDES permit will properly address this issue.
- 4. We had previously discussed the design of the proposed stormwater treatment at Outfall No. 027 during a conference call. I requested design calculations for the wet pond and questioned if the design generally complied with our Stormwater Design Manual (August 2010). Bob provided calculations during the meeting and explained that sufficient storage capacity was to be provided by the proposed design. As you may recall, my concerns were the presence of hydrocarbons at the influent from the off-loading area, the proper removal of sediment and cleaning of the forebay, and ensuring that non-erosive velocities would be achieved at the discharge to the stream. Bob explained that an access road would be constructed to allow heavy equipment in the area of the forebay for preventive maintenance (solids removal) and that sufficient storage volume would result in proper discharge velocities. The design calculations by EA state on Page 3 of 5 that the forebay is proposed to be 4 feet in depth. It may be appropriate to deepen the basin if sediment removal is the primary use and cleaning activities are expected. It was reported that construction is to begin in June 2013 and I provided approval to begin earthmoving at the completion of my inspection. However, the completion of the SPDES permit modification and addressing any public comments will be

required before formal construction of the system begins.

Miscellaneous:

- 1. We visited Outfall No. 013 and observed the ongoing construction of improvements to this area (photograph attached). It was reported that this outfall is the top priority of Lafarge due to the erosion upstream of the outfall (photograph of sediment attached), the number of violations (7), and the analytical data (65 to 1,050 mg/L). Please let me know of any update on the location of the gypsum pile as you reported that relocating it or a portion thereof may be planned. We understand that the current violations are attributed to the bank erosion but relocating the pile away from the area would be considered a Best Management Practice by the Department.
- 2. We also visited Outfall No. 014 and it was reported that Lafarge believes an off-site source of flow/turbidity may be impacting the quality of discharge. Six (6) violations were reported from this outfall in the time period of November 2011 to January 2013 with data in the range of 60 to 212 mg/L. I requested that Lafarge complete the cleaning of the forebay area, conduct subsequent sampling to verify the condition of this outfall, and provide additional mapping/research on the surface water bodies/property boundaries. Once completed and if appropriate, the Department will work with the adjacent property owner to implement Best Management Practices for the farming activity to reduce any off-site stormwater impacts.
- 3. We completed the inspection by observing Outfall No. 019, which appeared to be functioning properly but a cleaning of the forebay is needed. Also, Bob and I discussed the benefits of deepening the forebay for improved sediment removal and ease of cleaning. Your violation summary listed four (4) violations since November 2011 with data in the range of 58 to 290 mg/L. The combination of being located on the haul road and stormwater contact with gravel/concrete dust is likely contributing to the violations. While not a current priority, this outfall may benefit from a review by EA with an emphasis on determining the physical and chemical properties of the stormwater through field and laboratory testing. Your point is well taken that the characteristics of the stormwater in this area may be unique and the application of standard techniques for stormwater management/treatment may not be sufficient.

Thanks to you, Paul, Bob, and Sarah for making time to discuss and inspect the stormwater outfalls with me. We also welcome Sarah to the project team...

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